

Title (en)

Ultraviolet/infrared absorbent low transmittance glass

Title (de)

Ultraviolett/Infrarot absorbierendes Glas mit niedriger Durchlässigkeit

Title (fr)

Verre à faible transmission absorbant les rayonnements ultraviolets et infrarouges

Publication

EP 1020414 B1 20060802 (EN)

Application

EP 99310198 A 19991216

Priority

JP 569999 A 19990112

Abstract (en)

[origin: EP1020414A2] The ultraviolet/infrared absorbent low transmittance glass consisting of base glass including: 65 to 80 wt. % SiO₂; 0 to 5 wt. % Al₂O₃; 0 to 10 wt. % MgO; 5 to 15 wt. % CaO wherein the total amount of MgO and CaO is in a range of 5 to 15 wt. %; 10 to 18 wt. % Na₂O; 0 to 5 wt. % K₂O wherein the total amount of Na₂O and K₂O is in a range of 10 to 20 wt. %; and 0 to 5 wt. % B₂O₃, and colorants including: more than 1.2 wt. % and not more than 1.5 wt. % total iron oxide (T-Fe₂O₃) expressed as Fe₂O₃; equal to or more than 0.003 wt. % and less than 0.02 wt. % CoO; 0.0009 to 0.005 wt. % Se and 0.0005 to 0.05 wt. % NiO, wherein FeO expressed as Fe₂O₃ is in a range of 15 to 50 wt. % of T-Fe₂O₃. The ultraviolet/infrared absorbent low transmittance glass which has a bronze or gray color shade and which has low visible light transmittance, low solar energy transmittance and low ultraviolet transmittance, so that it is useful for a privacy protecting glass in a rear window of a vehicle.

IPC 8 full level

B60J 1/00 (2006.01); **C03C 3/087** (2006.01); **C03C 3/089** (2006.01); **C03C 3/091** (2006.01); **C03C 4/02** (2006.01); **C03C 4/08** (2006.01)

CPC (source: EP US)

C03C 3/087 (2013.01 - EP US); **C03C 4/02** (2013.01 - EP US); **C03C 4/082** (2013.01 - EP US); **C03C 4/085** (2013.01 - EP US); **Y10S 501/905** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1020414 A2 20000719; **EP 1020414 A3 20020313**; **EP 1020414 B1 20060802**; DE 69932585 D1 20060914; DE 69932585 T2 20061130; JP 2000203877 A 20000725; US 6287998 B1 20010911

DOCDB simple family (application)

EP 99310198 A 19991216; DE 69932585 T 19991216; JP 569999 A 19990112; US 45281299 A 19991202